

CALIFORNIA ENERGY COMMISSION

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October 31, 2003

Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First St., N.E., Room 1A
Washington, DC 20426

Reference: Docket No. PF03-6-000

Dear Ms. Salas:

The California Energy Commission, as an “expert agency” under the California Environmental Quality Act (CEQA), is pleased to submit scoping comments on the Sound Energy Solutions (SES) liquefied natural gas (LNG) project proposed for the Port of Long Beach (POLB). As noted in the Energy Commission’s *Draft Integrated Energy Policy Report* (IEPR), the Energy Commission has taken a lead role in coordinating state agencies that will be involved in permitting LNG facilities in California and in educating the public on LNG issues.

The staffs of state and local agencies that are participating in an LNG Interagency Permitting Working Group include the California Air Resources Board (CARB); the California Energy Commission; the California Public Utilities Commission (CPUC); the California Department of Fish and Game, including the Department’s Office of Spill Prevention and Response; the California Coastal Commission; the Department of Conservation; the Department of General Services; the San Francisco Bay Conservation and Development Commission; the State Lands Commission; the Governor’s Office of Planning and Research; the Port of Long Beach, and the Port of Humboldt Bay. The Working Group’s purpose is to establish close communication among state agencies potentially involved in permitting an LNG facility in California.

The Working Group has met over the last several months to develop and disseminate information on LNG issues, to identify key issues of concern to the state, and to understand each group member’s respective role and concerns regarding the construction and operation of potential LNG facilities in California. While members of the Working Group will be submitting individual comments reflecting each agency’s particular role, all members wanted to underscore the importance of early and extensive cooperation between federal, state and local agencies in assuring thorough and timely review of proposed LNG facilities. We applaud both FERC and the Port of Long Beach for conducting a coordinated review of this project and preparing a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR).

The comments provided below reflect the Energy Commission’s role under the Warren-Alquist Act of assuring that the state develops adequate energy supplies while protecting the environment and public health and safety. In addition, the Energy Commission has extensive experience in evaluating the environmental issues and

concerns that arise when siting major energy facilities through its jurisdiction for licensing thermal power plants that are 50 MW or larger.

Although an application for this project has not yet been submitted to either the federal or state governmental agencies, this project has started the “pre-filing” process at the Federal Energy Regulatory Commission (FERC). FERC along with the Port of Long Beach (POLB), the lead agency under CEQA, conducted a public meeting on October 9, 2003 to generally describe this project to the public, describe the upcoming governmental review processes, and to request scoping-level comments from the public and public agencies. These comments will be used by the FERC and the POLB to help direct the scope of issues addressed and types of analyses needed to reach a decision on this project. The Energy Commission will be actively following this project and governmental-review process and will provide further comments as more detailed information regarding this project becomes available.

Energy Planning Comments

As a public information document, the EIS/EIR should provide information on the energy context within which this project is being considered. We recognize that while FERC is the regulatory agency responsible for permitting much of the nation’s natural gas infrastructure, additional energy-related matters are beyond the control of FERC and POLB. We believe the EIS/EIR should inform the public regarding which agencies are responsible for making such energy regulatory and planning decisions. For information on the state energy context, please refer to the Energy Action Plan and the Energy Commission’s Integrated Energy Policy Report on the Energy Commission’s website (website address provided below):

- ***Energy Action Plan*** -
http://www.energy.ca.gov/2003_energy_action_plan/index.html
- ***Integrated Energy Policy Report*** -
<http://www.energy.ca.gov/energypolicy/index.html>

In addition, we have the following specific suggestions:

- The EIS/EIR should discuss the growing demand for natural gas and how LNG could augment natural gas supplies regionally (i.e., Southern California), in the Western U.S. and on the West Coast of North America. The discussion should specifically address how the imported LNG would be used in the state and region. Will the natural gas be used primarily for power generation, as a transportation fuel, for residential and commercial gas uses? Will any of the natural gas be exported out of state? Would a disruption of LNG deliveries from the facility in the future likely affect critical energy operations in the state (e.g., gas supply to electricity power generators)? Would this project’s LNG supply enhance the state’s energy security and help to stabilize energy-price volatility by making natural gas markets more competitive?

- The document should discuss the LNG supply chain, including the countries where the gas would originate and the energy security implications to California if natural gas supplies would originate from countries potentially experiencing political instability.
- The impacts to downstream natural gas pipeline infrastructure should be identified. Will the importation of LNG require upgrades in intrastate gas pipelines or natural gas storage facilities? What will be the volumes of natural gas introduced into the Southern California gas system and at what pressures will the new gas be introduced into the system?
- The EIS/EIR should include information on how gas pricing will be determined. This information would be useful in explaining to the public and ratepayers the potential socioeconomic impacts of the project as well as in comparing the economic pros and cons of project alternatives.
- The EIS/EIR should include information on contemplated contractual terms with natural gas suppliers (e.g., term, contracted volumes, take-or-pay, ex-ship or free-on-board provisions).
- The environmental document should address the gas quality issue. Will the natural gas consistently meet existing state gas-quality (i.e., CARB, CPUC) standards? Will its use cause any impact on combustion emissions from natural gas-fired equipment?
- What are the likely markets for the “natural gas liquids” that are removed from the LNG (e.g., ethane and LPG)?
- For the LNG that will be used for transportation fuel, what will be its minimum methane content? Who will determine the minimum quality of transportation-fuel LNG? If or when the methane content is lower than that required for transportation-fuel LNG (typically 96 - 98%), will the LNG be re-refined to meet the requirements?
- The document should describe the fleets that will use the transportation-fuel LNG supplied from the SES project. Will these fleets include both on-road, as well as off-road, diesel fleets? What is the estimated reduction in diesel fuel consumption if these fleets were fueled by LNG?
- The Energy Commission's Transportation Technology Office is aware of a growing number of LNG fleets in Southern California. Will the LNG be marketed to fleet owners outside of the Port? Would SES's transportation-fuel LNG displace transportation-fuel LNG that is currently being trucked into Southern California from Topock and other sources? If so, what are the economic, environmental, and public-safety impacts of displacing trucked-in LNG supplies?
- The document should analyze whether carriers delivering LNG would impact the ability of other ships to make deliveries into the state through the POLB, including ships carrying other fuels, such as gasoline, diesel, and crude oil.

- As part of your review of the project, the implications of international agreements on the reliability and pricing of LNG should be identified.

Alternatives Development

- The EIS/EIR should state that the project's objective is to provide a supply of natural gas to Southern California. As required by NEPA and CEQA, the review of alternatives should be comprehensive and specific. With this project objective, the alternatives section of the EIS/EIR should address alternative supplies of natural gas, alternative on-shore and off-shore project locations, and alternative LNG technologies.
 - Alternative sources of natural gas include additional supplies available from proposed interstate pipeline additions and expansions.
 - With respect to site and technology alternatives, we believe that the proposed Baja California LNG facilities, the previously considered facility at the Port of Los Angeles, and proposed California offshore LNG facilities located near Ventura County should be evaluated.
- The FERC and the POLB should coordinate the identification and analysis of alternatives with the state and federal agencies undertaking reviews of other LNG projects proposed in Southern California.

Safety and Environmental Impact Analysis

Safety Analysis

- To better educate the public about LNG safety, the EIS/EIR should reference the many LNG safety and security regulations in place, including the new Marine Transportation Security Act regulations and the International Maritime Organization code.
- Project proponents typically go through very involved analyses of risk to eliminate or reduce potential safety hazards. SES should detail this process to the FERC and POLB and an explanation of this process should be included in the EIS/EIR. Documenting the internal safety evaluations will help to address concerns of the public regarding thoroughness of safety evaluations.
- Terrorist risk is an issue of particular concern to the public. Although NEPA documents attempt to be as concise as possible, we urge you to expand the safety discussion to reflect the public's serious concerns over this issue. Only limited information on terrorism has been included in previous FERC environmental documents for proposed LNG terminal projects. Even if probabilities cannot be quantified or identified, the EIS/EIR should provide as much information as possible on terrorism risk. Please refer to the *Health and Safety Issues Final Report* for the

Mare Island LNG import facility as an example of useful descriptions of qualitative risk evaluations.

- The EIS/EIR should identify the consequences of a worst-case situation created by a terrorist attack on the facility, specifically providing information on the release of liquid LNG, how it will vaporize, the fate and transport of the LNG vapor plume, and extent of the area potentially affected by both the flame and thermal radiation if the vapor plume were ignited. The Energy Commission staff studies the fate and transport of power plant exhaust plumes as part of its analysis of power plants proposed at coastal locations. Specifically, it conducts detailed fumigation studies using sophisticated models that have been customized to better portray California's conditions. Many parameters must be examined in detail before one can conclude there would be or would not be a significant public safety risk. These parameters include chemical composition of the vapor cloud or plume; physical attributes of the plume, including buoyancy, mixing rate, temperature, and density; normal or most likely meteorological conditions at the proposed site, including temperature, wind speed, and direction, inversion layers, and pollution levels; adverse meteorological conditions based on historical records; and, alternative engineering designs to mitigate potential impacts. These analyses involve many postulated conditions. The recommended LNG vapor cloud study needs to consider a variety of meteorological conditions, including marine inversions. Based on the results of these analyses, measures should be identified that could mitigate any potentially unacceptable consequences.
- Operating safety is largely controlled by the Operations Plan (O-Plan) submitted after the EIS/EIR is finalized. O-Plans are not made available to the public for security reasons. Please consider providing a generic overview of the O-Plan or, at a minimum, include the O-Plan's table of contents.
- We urge that a workshop (limited to appropriate agencies) be convened for security organizations. Following the meeting with security organizations, we urge that a public workshop be held to address safety and security concerns. The EIS/EIR should address how safety and emergency response planning would be addressed.
- Please discuss the various certificate programs (ISO, USCG Qual Ship 21) that exist to provide additional safety assurances for LNG carriers and import terminals and determine whether the SES project should obtain these certifications
- The EIS/EIR should identify and evaluate measures to mitigate the spread of LNG spills on water (e.g., floating berms around a spill at sea or a tanker at berth).
- Please identify in the report which agencies would be responsible for safety inspections of the carriers, terminal facilities, and pipeline once the terminal is built and operating.
- The document should discuss legal liability for losses due to LNG spills and the extent of liability.

- The document should identify the locations of downstream natural gas pipelines needed to connect the proposed project to the state's natural gas system and address the public safety issues associated with these types of facilities.

Environmental Impact Analysis

The Energy Commission, in its permitting of major energy facilities, conducts an extensive environmental review. We recommend that your environmental staff and consultants review examples of Energy Commission Final Staff Assessments (FSAs) to understand the types and ranges of analyses conducted. We urge your environmental staff to incorporate the same level of analysis in the EIS/EIR for the SES project.

At a minimum, we would expect to see the following impact areas discussed, along with related mitigation measures:

- **Air Quality:** Identify criteria pollutant emissions from terminal construction and operation (e.g., vaporization or flare emissions), pipeline operation (e.g., new compressors), and tanker operations. Also, identify reductions in air emissions anticipated from using a portion of the delivered LNG rather than diesel as a vehicle fuel. Based on the current and future emission standards for diesel-fueled vehicles, what are the expected air emission impacts from the use of LNG from the SES project?;
- **Biological Resources:** Evaluate the potential for adverse effects for threatened and endangered species, sport and commercial species, and both onshore and offshore species otherwise protected, and any dredging impacts.
- **Cultural Resources:** Identify whether historic port facilities may be affected and whether any new, buried facilities (e.g., pipelines) may affect archaeological resources;
- **Geological Resources:** Provide an analysis of the likelihood of ground rupture, seismic shaking, mass wasting and slope stability, liquefaction, subsidence, and expansion or collapse of soil structures at the project site and explain the design standards of the LNG storage tanks that will ensure their integrity during severe earthquakes.
- **Land Use:** Identify existing and planned land uses within one mile of the site. Discuss the effects of project construction on those land uses, the project's operational compatibility with existing and planned land uses, and zoning requirements. Provide a final location of the proposed pipeline. Address any issues regarding proximity to the Long Beach airport. Identify sensitive receptors (schools, residences, etc) within one mile. Explain whether the thermal radiation and flammable vapor cloud exclusion zones will be under the legal control of the applicant. (Please note that the one-mile distance may need to be adjusted if plume dispersion studies indicate that a different area may be potentially affected.)
- **Noise:** Describe the major noise sources of the project and an estimate of the project's noise levels, during both construction and operation, at residences,

hospitals, libraries, schools, places of worship or other facilities where quiet is an important attribute of the environment.

- **Public Health:** Analyze chronic (long-term) non-cancer hazard and cancer risk, and acute (short-term) non-cancer hazard resulting from exposure to non-criteria pollutants resulting from terminal construction and operation;
- **Socioeconomic Resources:** Identify whether an environmental justice population exists by providing appropriate demographic information. Provide adequate notification of affected groups to encourage their participation in the public review process. We suggest that the vapor-cloud exclusion zone boundaries be used to identify the affected communities that would be subject to an environmental justice review for air quality, public health, and hazardous materials.
 - **Jobs and Commerce:** Discuss potential impacts on jobs and commerce caused by potential shipping delays due to possible restrictions on ship movements in and around the POLB, when an LNG carrier is present.
 - **Jobs:** Discuss the number of project construction and permanent workers expected, project schedule in terms of average versus peak labor force intervals, and estimate how many workers and skill levels would be drawn from the Long Beach/Los Angeles region;
 - **Fiscal:** State the project's expected capital cost, and tax distribution requirements for the City of Long Beach, City of Los Angeles, and any other public entities;
- **Water and Soil Resources:** Address any ballast water issues involving the potential introduction of exotic species into state waters. Identify where water for hydrostatic testing of the storage tanks would come from and where/how water will be discharged. Discuss where any fill/borrow material will come from/go. Discuss water intake and/or discharge structures and their impacts. Discuss potential changes in water quality, quantity, and temperature parameters from project operations. Provide detailed storm water and erosion/sediment control plans for any onshore portions of the project. Discuss the environmental impacts of any spills into the environment.
- **Traffic and Transportation:**
 - **Onshore:** Define the existing traffic situation in terms of morning and afternoon peak commuting hours, expected number of project construction workers, expected travel routes, parking areas for construction workforce and any need for remote parking lots, and cumulative traffic impact of any other onshore projects planned for the Long Beach/San Pedro port area;
 - **Offshore:** Discuss the project's impact on existing and planned tanker and other marine traffic at the POLB;

- **Visual Resources:** Characterize the existing setting with photos, identify key observation points, and evaluate how the project will change the visual experience.
- **Waste Management:** Discuss how hazardous and non-hazardous wastes will be managed and disposed of both from terminal construction (including any required cleanup of existing contamination at the proposed site) and during facility operation;
- **Worker Safety and Fire Protection:** Discuss worker safety and fire-training programs specific to LNG. Provide the location and capability of POLB fire protection services, and related back-up by the City of Long Beach and/or Los Angeles. Discuss any enhancements to the fire protection and emergency response services that may be required.

Coordination with State Agencies

- We strongly encourage the FERC to meet with the California agencies as soon as possible to continue the active participation of all appropriate federal and state agencies in the review of proposed LNG facilities.
- Please issue a Preliminary Draft EIS/EIR to all interested state agencies, to enable the state agency staffs to review the document for consistency with other LNG environmental documents and to highlight and address any areas of conflict before public release.

We wish to thank you for this opportunity to comment on this project at this early stage of consideration. This is the first of several LNG facilities being proposed in California. The Energy Commission believes that it is critical to identify issues early on and to communicate clearly what level of analysis the state deems necessary to fully evaluate such facilities. The public needs to be involved in understanding the potential effects this project will have on California and their local and regional community. Therefore, the inclusion of several local public workshops by your agencies on this project is essential.

Should you have any questions regarding the comments presented above, please call Mr. David Maul, Manager of the Natural Gas and Special Projects Office, at 916-654-3941, or Ms. Mignon Marks, Siting Policy Specialist, at 916 654-4732.

Thank you again for this opportunity to provide you comments. We look forward to working with both your agencies in the future on this project.

Sincerely,

/s/

TERRENCE O'BRIEN, Deputy Director
Systems Assessment & Facilities Siting

Submission Contents

Recommending Which Issues Should be Addressed in the Environ. Impact Statement
for SESs LNG Proj...

PF03_6_000_Scoping_Comm.doc..... 1-8